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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,332	11/26/2003	Eric A. Merz	117418	8383
25944	7590	11/02/2005		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER STAFIRA, MICHAEL PATRICK	
			ART UNIT 2877	PAPER NUMBER

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,332

Applicant(s)

MERZ ET AL.

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 12-16, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 4-11 and 17-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/26/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

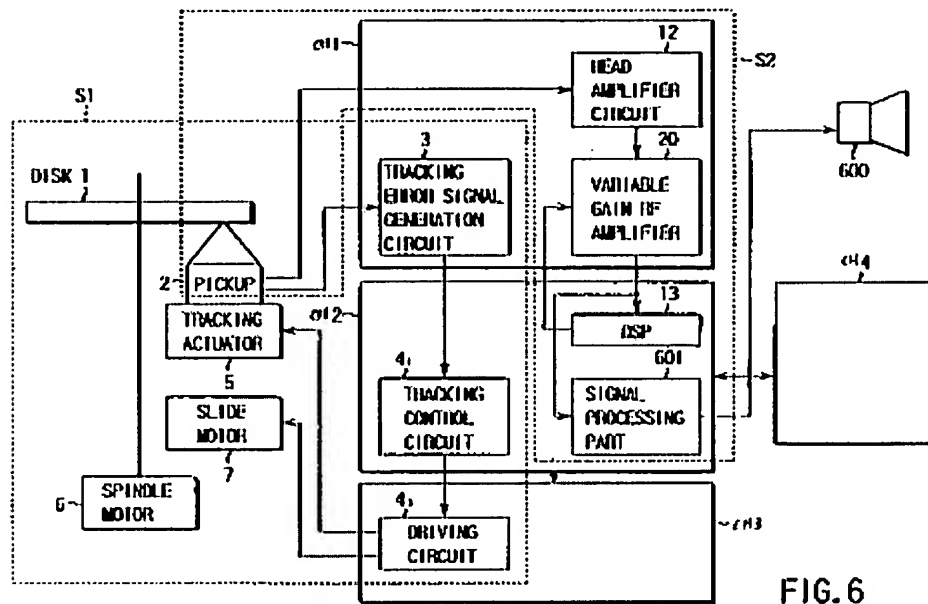
2. Claims 1-3, 12, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamashita et al. ('224).

Claim 1

Yamashita et al. ('224) discloses an optical emitter emitting an optical signal of an optical signal level according to an emitter input from an electric source (Col. 10, lines 9-14); an optical detector disposed to detect the optical signal and output a detector output having an output metric according to the detected optical signal, the output metric being a voltage level (Col. 10, lines 9-14); a variable attenuator having an adjustable attenuation setting to provide a variable sensitivity to the optical sensor device (Col. 12, lines 50-55); and a controller adjusting (Fig. 6, Ref. 13) the attenuation setting of the variable attenuator during an adjustment operation to adjustably vary the variable sensitivity of the optical sensor device (Col. 16, lines 38-52), determining the attenuation setting at which the output metric of the detector output exceeds a predetermined value (Reference value), and accordingly setting the variable attenuator at an attenuation setting

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to operate the detector output with the output metric better than the predetermined value by a margin (Col. 16-17, lines 38-39) .

**Claim 2**

Yamashita et al. ('224) discloses the electric source is a voltage source (See Abstract).

Claim 3

Yamashita et al. ('224) further discloses the electric source is a switched signal (Col. 16-17, lines 55-11).

Claim 12

The reference of Yamashita et al. ('224) further discloses the controller is further capable of identifying an alert condition when the sensor compensation is insufficient to achieve desired sensor performance (Col. 10, lines 19-33).

Claim 15

Yamashita et al. ('224) discloses operating the optical sensor by positioning and

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activating the optical sensor over a medium, the optical emitter being disposed to emit an optical signal towards the medium, and the optical detector being disposed to detect the optical signal from the medium and output a detector output having an output metric according to the detected optical signal, the output metric being a voltage level (Col. 10, lines 9-14); adjusting the attenuation setting of the variable attenuator through a range of attenuation values by discrete step values to vary the output metric of the detector output (Col. 12, lines 51-55); comparing the varying output metric of the detector output with a predetermined value, and determining the attenuation setting at which the output metric of the detector output exceeds the predetermined value (Col. 16, lines 31-37); and setting the attenuation of the variable attenuator to reset the output metric of the detector output at a level exceeding the predetermined value by a margin (Col. 16, lines 38-52).

Claim 16

Yamashita et al. ('224) further discloses the step of setting a fault indication to indicate that the sensor compensation is insufficient to achieve the predetermined value (Col. 10, lines 19-30).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. ('224) in view of Oda et al. ('313).

Claim 13, 21

Yamashita et al. ('224) substantially teaches the claimed invention except that it does not show a thermal ink jet printer having an optical sensor device. Oda et al. ('313) shows that it is known to provide a thermal ink printer with an optical sensor device (See Fig. 1) for an optical sensor device. It would have been obvious to combine the device of Yamashita et al. ('224) with the thermal ink jet printer having optical sensor device of Oda et al. ('313) for the purpose of providing an optical sensor which does not need to contact the surface to which it is measuring, therefore providing more accurate measurements since will collect less contaminate.

5. Claims 14, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. ('224) in view of Mestha et al. ('040).

Claim 14, 22

Yamashita et al. ('224) substantially teaches the claimed invention except that it does not show a xerographic having an optical sensor device. Mestha et al. ('040) shows that it is known to provide a xerographic with an optical sensor device (See Fig. 2) for an optical sensor device. It would have been obvious to combine the device of Yamashita et al. ('224) with the xerographic having optical sensor device of Mestha et al. ('040) for the purpose of providing an optical sensor which does not need to contact the surface to which it is measuring, therefore providing more accurate measurements since will collect less contaminate.

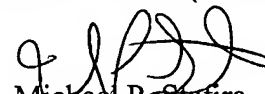
Allowable Subject Matter

6. Claims 4-11, 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael P. Stafira
Primary Examiner
Art Unit 2877

October 26, 2005